

USSN 09/975,132

LIST OF CLAIMS, SHOWING THE STATUS OF EACH CLAIM

Underlining denotes added text while strikethrough denotes deleted text.

1. (Currently Amended) A process for enhanced secretion of a polypeptide ~~in~~ by bacteria, comprising:
 - (a) culturing bacterial cells that contain a recombinant expression vector comprising a first DNA sequence encoding a polypeptide that can be secreted by the bacteria and a second DNA sequence encoding a charged, amino-acid tag covalently bonded at the carboxy-terminus of said polypeptide, such that the polypeptide is produced by the cells, and wherein said tag comprises one or two negatively charged amino acid residues; and
 - (b) optionally, recovering the polypeptide from the culture medium.
2. (Cancelled)
3. (Currently Amended) The process of claim ~~2~~ 1, wherein said tag comprises ~~at least two~~ negatively charged amino acid residues or ~~at least two~~ positively charged amino acid residues.
4. (Original) The process of claim 3, wherein said tag comprises two negatively charged amino acid residues, selected from the group consisting of D and E.
5. (Original) The process of claim 4, wherein said tag comprises two D residues.
6. (Currently Amended) The process of claim 3, wherein said tag comprises two positively charged amino acid residues, wherein said two positively charged amino acid residues are lysines (Ks), ~~selected from the group consisting of K and N.~~
7. (Cancelled)

USSN 09/975,132

8. (Original) The process of claim 1, wherein said bacteria is a *Bacillus* species.
9. (Original) The process of claim 8, wherein said bacteria is *B. subtilis*.
10. (Original) The process of claim 1, wherein said expression vector further includes a DNA sequence encoding a signal peptide operatively linked to said first DNA sequence.
11. (Original) The process of claim 10, wherein said signal peptide is *B. licheniformis* α -amylase (AmyL) signal peptide.
12. (Original) The process of claim 1, wherein said polypeptide is a heterologous protein selected from the group consisting of hormones, enzymes, and growth factors.
13. (Original) The process of claim 12, wherein said protein is human interleukin.
14. (Currently Amended) A method for enhancing the secretion of a heterologous polypeptide in by a *Bacillus* species, comprising: substituting one or more of the C-terminal amino acids residues of said polypeptide with at least one charged amino acid residue, or adding one or more charged amino acid residues to the C-terminus of said polypeptide, wherein the number of amino acid residues substituted or added to the C-terminus of said polypeptide comprises two amino acid residues.
15. (Original) The method of claim 14, wherein the last two amino acid residues of said polypeptide are substituted with a D.
16. (Original) The method of claim 14, wherein the last two amino acid residues of said polypeptide are substituted with a E.
17. (Original) The method of claim 14, wherein the last two amino acid residues of said polypeptide are substituted with a K.

USSN 09/975,132

18. (Cancelled)

19. (Original) The method of claim 14, wherein two D residues are added at the C-terminus of said polypeptide.

20. (Original) The method of claim 14, wherein two E residues are added at the C-terminus of said polypeptide.

21. (Original) The method of claim 14, wherein two K residues are added at the C-terminus of said polypeptide.

Claims 22-52. (Cancelled)